

Chapter 11. Fire Protection

Fire services are provided by the Placer Hills Fire Protection District (FPD) and California Department of Forestry and Fire Protection (CDF.) Placer Hills FPD primarily responds to structural fires and provides first-responder medical aid. CDF has primary jurisdiction over all wildland fires. Because there is little or no break in the wildland/structural interface, the two systems are interdependent, particularly during large fire activity, and in summer when fire danger is high.

Placer Hills Fire Protection District

Placer Hills FPD faces several concerns, including establishing adequate vegetation fuel management policies, identifying sources of water supply for fire suppression, recognizing the increased risk of hazardous materials spills, designing shaded fuel breaks and fire breaks, upgrading existing circulation for emergency access, assisting CDF with defensible space around structures, and vegetation management for a healthy fire safe forest. The district encompasses approximately 33 square miles (over 21,000 acres.) In 1997, the district included approximately 9,200 people, 3,200 residential dwellings, and 68 non-residential buildings. Three commercial areas and five schools are within the district.

Natural vegetation types are Ponderosa pine, brush, and oak woodland. The native, living vegetation surrounding the rural residences in the area is flammable because of its dryness, structure, and dense growth. The area has a history of high-intensity fires, especially in riparian areas along river drainages, and the possibility of a conflagration exists each summer. Narrowness, dead-end configuration, lack of road identification, and inadequate sight distances of existing roads are problems for fire service.

Placer Hills FPD operates three fire stations staffed primarily by volunteer firefighters who reside in the various communities served within the district. In the Plan area, Station No. 1 (the district office) is located at Placer Hills Road and Combie Road. The district also has stations at Applegate and Weimar. The weekday, daytime staff includes one fire marshal/captain, one fire apparatus engineer, and two firefighters at two stations. This engine coverage pattern ensures that response is immediate when many volunteer firefighters are working outside the communities that they serve. During evenings, weekends, and holidays, volunteer firefighters and officers respond to emergencies. Placer Hills FPD paid personnel includes six part-paid volunteer fire officers, including the Fire Chief, and one full-time secretary.

The district is authorized to collect fees to mitigate the impacts of new

development.

California Department of Forestry and Fire Protection

The entire Plan area is served by CDF, which is responsible for the prevention and suppression wildland fires in unincorporated areas of the state. In Placer County, CDF operates stations in Colfax, Lincoln, Auburn, Foresthill, Alta, and Higgins Corner. The Auburn station is the most likely to serve the Plan area, but all the stations could respond to a major wildfire. During summer months, five fire handcrews work throughout Nevada, Placer, and Yuba Counties to provide additional fire protection. CDF has rated most of the plan area as being in a very high fuel hazard severity zone, with small sections of high fuel hazard severity zone between I-80 and the central district and the southwest corner of the plan area.

The state has adopted fire protection regulations to establish minimum wildfire protection standards in conjunction with building, construction, and development in state responsibility areas (SRAs,) which includes all of the Placer Hills FPD service responsibility areas. The regulations do not apply to existing structures, roads, streets and private lanes, or facilities; however, they do apply to the permitting or approval of new parcels after January 1, 1991. The regulations include provisions for emergency access, road width, roadway surface, roadway grades and radius, roadway turnarounds, signage, one-way road designs, gate entrances, and street and road signs names and numbers, in addition to private water supply reserves for emergency fire use and fuel breaks and greenbelts. These requirements reduce the potential for wildland fires, decrease response times, and improve firefighter's chances of extinguishing wildland fires.

In November 1991, the Subdivision Ordinance and Project Development Standards as included in the County's Land Development Manual, were modified to incorporate the State Fire Safe Standards.

Regulatory Setting

Public Resources code 4291 requires at least a 30-foot defensible firebreak to be maintained around structures in the county, which involves removing and clearing away all flammable vegetation or combustible growth. Extra hazardous conditions may warrant additional clearing distances. By County ordinance, new development is required to provide static on site storage of water to be used in the event of fire (e.g., swimming pool or storage tank) if not connected to a water district. Placer Hills FPD has ordinances and regulations for new construction. Ordinance 92-002 (adopted on May 6, 1992,) requires the maintenance of a 30-foot clearance around structures,

with up to 150 feet of clearance required at the discretion of the Fire Chief or Fire Marshal. Ordinance 92-003 addresses disposal of flammable vegetation.

Defensible Space. Because of the potential for high-intensity fires to threaten structures in the Meadow Vista community, the Placer Hills FPD, the Placer County Resource Conservation District, National Resources Conservation Service, and CDF produced a "Defensible Space Handbook" and video tape to educate the residents of Meadow Vista (Placer Hills Fire Protection District, et. al., 1995.) The handbook recognizes that improvements to existing infrastructure are limited because of financial and other constraints. Consequently, the handbook addresses improvements to fuel loading in the Plan Area and states, "The amount of fuels can be reduced, vertical arrangement and horizontal continuity of fuels can be altered, flammable vegetation can be removed or modified, and moisture content can be increased (i.e., replace low-moisture content plants with those of higher moisture."

"Defensible space" is defined as "that area between a house and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and which provides an opportunity for firefighters to safely defend the house." Absence of fire in recent decades has increased fuel loading in the Plan area, contributing to the potential for a high-intensity wildfire to occur. The program focuses on reducing the dead vegetation and mid-level forest vegetation of shrubs and brush and educating and empowering residents to protect their homes.

The fire season is typically mid-May through October, when weather is warm to hot with low humidity. Topography is typical of the Sierra Nevada foothills, characterized by long, narrow valleys with moderate to steep sloping hillsides. Wildfires spread four times more quickly on a 30% slope than on level terrain. South- and southwest-facing slopes are the most hazardous aspects for homes; many homes are situated adjacent to chimneys and along the canyon rim.

IMPACTS

Criteria for Determining Significance

The State CEQA Guidelines, Appendix G, does not provide guidance for determining when a project will normally have a significant impact on fire protection; however, interpretation of the CEQA guidelines indicates that a project will normally have a significant effect on the environment if it will:

- expose people or structures to increased fire hazards

- substantially increase the demand for fire protection personnel or equipment
- result in wildfire regimes outside of the normal range of natural variability

Relevant Community Plan Goals, Policies, and Implementation Programs

The Community Plan includes policies that call for the provision of adequate public facilities and services, including fire protection.

- 5.H.5.** The County shall work with the Placer Hills Fire Protection District to identify key fire loss problems and design appropriate fire safety education programs to reduce fire incidents and losses. [Goal 4.I.4.*]
- 5.H.6.** The County shall work with the Placer Hills Fire Protection District and implement ordinances to control fire losses and fire protection costs through fuel reduction management and the use of automatic fire detection, control, and suppression systems. [Goal 4.I.5., 12/30]
- 5.H.11.** The County shall encourage the modification of vegetation around structures, and developments shall be required to reduce radiant heat along fire escape routes, providing for the safety of residents and fire fighting personnel. Fuel modification will reduce the intensity of a wildfire by reducing the volume and density of flammable vegetation. These areas shall provide (1) increased safety for emergency fire equipment and evacuating civilians; (2) a point of attack or defense from a wildfire; and (3) strategic siting of fuel breaks, fire breaks, and greenbelts.
- 5.H.12.** The County shall require that discretionary permits for new development in fire hazard areas be conditioned to include requirements for a fire safe community, defensible space fire-resistant vegetation, cleared fire breaks and fuel breaks, or a long-term comprehensive fuel management program. Fire hazard reduction measures shall be incorporated into the design of development projects in fire hazard areas of Meadow Vista. [Goal 8.C.2]
- 5.H.14.** The County shall encourage fire protection agencies to continue education programs in schools, service clubs, organized groups, industry, utility companies, government agencies, press, radio, and

television in order to increase public awareness of fire hazards within the county, and to develop high-visibility fire prevention programs, including those offering voluntary home inspections and promoting awareness of home fire prevention measures. [Goal 8.C.6., 8.C.9.*]

5.H.15. The County shall work with the local fire protection agencies, the California Department of Forestry and Fire Protection (CDF,) and the U.S. Forest Service to promote the maintenance of existing fuel breaks and emergency access routes for effective fire suppression. [Goal 8.C.7.]

5.H.17. The County shall continue to work cooperatively with the California Department of Forestry and Fire Protection and local fire protection agencies in managing wildland fire hazards. [Goal 8.C.11.]

Impact Analysis

Fuel loading is a known issue of concern. The MVCP Steering Committee requested the Placer County Planning Department to undertake a woodland/wildlife inventory as a first step in preparing a community forestry master plan to guide long-term management of Meadow Vista's environmental resources. The Steering Committee believes that a Forestry Master Plan is needed because the coexistence of the Ponderosa pine forest, foothill woodland, and brush in the Plan area results in a transition zone of woody species that is unique in the County. Lack of funding has prevented the development of a Forestry Master Plan for the Plan area. The committee is concerned about the extremely high fire danger in the community.

Successful implementation of the Vegetation Management Project would lead to favorable impacts on fire fighting agencies, as well. In the long run, the project would make it safer to fight fires around houses; would slow down the spread of fires between houses; and would lower overall fuel loads found in the forests of Meadow Vista. Overall long-term statistics for houses lost to fires, injuries to residents during fires, and costs of fire suppression are expected to go down. Care must be taken, however, to reduce the threat of wildland fire by adequate clean-up following timber operations, including provisions for controlled burning of slash and debris.

The CDF Fire and Resource Assessment Program (1997) conducted a preliminary benefit-cost analysis for the application of fuel breaks, fire-safe clearance around houses, and prescribe fire in the area of the communities of Applegate and Meadow Vista. While somewhat different in scope and approach than the program

proposed by this PTEIR, this study indicated that the examined prefire activities would produce benefits that were about 14 times the costs of the activities. These study results indicate a very high potential payoff for the kinds of prefire activities proposed in this PTEIR.

The PTEIR process could increase the short-term demand for wildland fire protection services through the use of more prescribed fires. The program can only be effective if the public is informed of its benefits through an education program administered by fire agency personnel, Resource Conservation Districts, and other agencies and organizations. The actual amount of increased demand cannot be determined because the levels of service will vary, depending on the commitment of fire service agencies and public participation.

California Forest Practice Rules Requirements

All applicable Forest Practice Rules will apply to any PTHP undertaken pursuant to the PTEIR. The following Rules are particularly relevant for fire protection. As part of the project description, these Rules will reduce many potential impacts to a less than significant level. Please see *Air Quality* for additional burning restrictions.

1. All woody debris created by timber operations greater than one inch but less than eight inches in diameter within 100 feet of permanently located structures maintained for human habitation shall be removed, chipped, or piled and burned; all slash created between 100-200 feet of permanently located structures maintained for human habitation shall be lopped for fire hazard reduction, removed, chipped or piled and burned; lopping may be required between 200-500 feet where unusual fire risk or hazards exist as determined by the Director or the RPF. (937.2(c))
2. Within 100 feet of the edge of the traveled surface of public roads, and within 50 feet of the edge of the traveled surface of permanent private roads open for public use, slash created and trees knocked down by road construction or timber operations shall be treated by lopping for fire hazard reduction, piling and burning, chipping, burying or removal from the zone. (937.2(b))

MITIGATION

1. Lop all logging slash to less than 20 inches above ground, except in those areas where current rules require other treatment (within 100 feet of residences).

2. Require clean up and disposal of debris on the ground within shaded fuelbreak projects to lower potential fire danger.
3. Require clean up and disposal of all substantial size debris (greater than 1 inch) within defensible space harvests to lower potential fire danger.
4. Require rapid surface drying (spreading of material away from wet areas) for material left on the ground to prevent increase in insect brood material.
5. All clean up and disposal of debris shall be by chipping, removing, or burning. Chipping shall occur no later than 45 days after creation. Piling for burning shall occur no later than 60 days after creation of the debris, with burning no later than April 1 of the year following creation or one year from date of creation, whichever comes first. Removal of debris shall occur no later than 60 days after its creation.

Level of Significance Following Mitigation

Implementation of the proposed mitigation measures will reduce potential fire protection impacts to a less than significant level.